

RESPONSE UNDER 37 C.F.R. 1.116
U.S. Appln. No. 10/625,777

Attorney Docket No. Q76569

REMARKS

Claims 46-61 have been rejected under 35 U.S.C. § 112, first paragraph. Specifically, the Examiner maintains that the specification does not adequately describe the features relating to the relative brightness levels recited in independent claims 46, 49, 52, and 57. Applicants respectfully disagree.

With respect to claim 46, the specification describes a non-limiting example of a method which alternately performs a first light-emission drive sequence (shown in Fig. 46A) to display odd fields (A) (or odd frames) and a second light-emission drive sequence (shown in Fig. 46B) to display even fields (B) (or even frames). (Page 73, lines 6-9). Moreover, as described in conjunction with Figs. 48 and 49, a brightness level (e.g., the brightness level 29 or 46) of respective brightness points “□” are obtained at a single pixel by carrying out the first light-emission drive sequence for the odd fields (A), and a brightness level (e.g., the brightness level 23 or 37) of respective brightness points “◊” are obtained at a single pixel by carrying out the second light-emission drive sequence for the even fields (B). (Page 79, line 6, to page 80, line 16).

Also, a brightness level (e.g., the brightness level 37) of brightness points “■” between adjacent brightness points “□” are obtained by carrying out the first light-emission drive sequence for the odd fields (A) as a result of multi-level gray-scale processing. Similarly, a brightness level (e.g., the brightness level 29) of brightness points “■” between adjacent brightness points “◊” are obtained by carrying out the second light-emission drive sequence for the even fields (B) as a result of multi-level gray-scale processing. In the exemplary embodiment, dither processing is a type of multi-level gray-scale processing used to obtain the brightness points

“■,” and error diffusion processing is another type of multi-level gray-scale processing to obtain other brightness points between adjacent brightness points “□” and between adjacent brightness points “◊.” (Page 79, line 25, to page 80, line 10).

As explained in the non-limiting embodiment shown in Figs. 15-18, an error diffusion processing circuit 330 performs error diffusion processing on pixel data HDp to create six-bit error diffusion processing pixel data ED. The pixel data ED corresponding to a pixel G(j, k) is generated based on error data corresponding to pixels G(j, k-1), G(j-1, k-1), G(j-1, k), and G(j-1, k+1). (Figs. 15 and 16; page 30, line 22, to page 32, line 5).

Also, in the embodiment, a dither processing circuit 350 performs dither processing on the pixel data ED to obtain four-bit multi-level gray-scale data Ds. (Page 32, lines 14-19). By performing the dither processing, a plurality of adjacent pixels can express one intermediate display level. (Page 32, lines 21-23). For example, as described in conjunction with Figs. 17 and 18, the circuit 350 obtains the data Ds by generating and processing dither coefficients a, b, c, and d for four pixels G(j, k), G(j, k+1), G(j+1, k), and G(j+1, k+1). (Page 33, line 17, to page 36, line 3).

As described above, the specification adequately describes a non-limiting example of a method in which the brightness level (e.g., the brightness level 29) of respective gray-scale brightness points “□” are obtained at a single pixel by carrying out the first light-emission drive sequence for the odd fields (A). Furthermore, as shown in Fig. 49, the brightness level 29 is set to coincide with the brightness level (e.g., the brightness level 29) of respective gray-scale brightness points “■” that are obtained at a group of pixels (e.g., pixels G(j, k), G(j, k+1),

$G(j+1, k)$, and $G(j+1, k+1)$) by carrying out the second light-emission drive sequence for the even fields (B) as a result of multi-level gray-scale processing (e.g., dither processing).

For at least the reasons presented above, Applicants submit that independent claim 46 satisfies the requirements of 35 U.S.C. § 112, first paragraph. Also, Applicants submit that claim 52 is patentable for similar reasons.

In addition, Fig. 51 and the corresponding description in the specification disclose a non-limiting embodiment in which a brightness level (e.g., the brightness level 39) of respective gray-scale brightness points “□” are obtained at a single pixel by carrying out the first light-emission drive sequence for the odd fields (A). Furthermore, the brightness level 39 is set to differ with a brightness level of respective gray-scale brightness points “■” that are obtained at a group of pixels (e.g., pixels $G(j, k)$, $G(j, k+1)$, $G(j+1, k)$, and $G(j+1, k+1)$) by carrying out the second light-emission drive sequence for the even fields (B) as a result of multi-level gray-scale processing (e.g., dither processing).

Accordingly, Applicants submit that independent claim 49 satisfies the requirements of 35 U.S.C. § 112, first paragraph. Also, Applicants submit that claim 57 is patentable for similar reasons.

Since the Examiner only rejected dependent claims 47, 48, 50, 51, 53-56, and 58-61 under 35 U.S.C. § 112, first paragraph, due to their dependency on claim 46, 49, 52, or 57, Applicants submit that the dependent claims are patentable.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

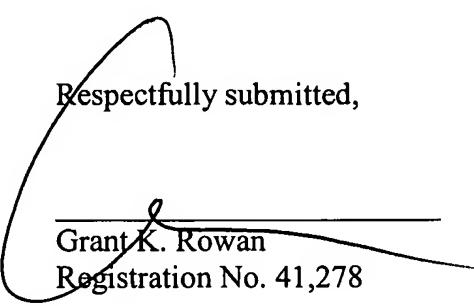
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U.S. Appln. No. 10/625,750

Attorney Docket No. Q76569

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


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